

What is claimed is:

1. A communication system for performing a conversation with an actual or fictional human, animal, doll, character or the like virtualized by using a computer, comprising:

a client and a server, wherein

the client includes:

an input portion for inputting a first message addressed from a user to the human or the like;

a transmitting portion for transmitting the first message;

a receiving portion for receiving a second message and facial animation of the human or the like, the second message being addressed from the human or the like to the user as a response to the first message;

an output portion for outputting the second message to the user; and

a display portion for displaying the facial animation, and

the server includes:

a storing portion for storing facial image data of the human or the like,

a receiving portion for receiving the first message,

a first generating portion for generating the second message in response to the reception of the first message,

a second generating portion for generating motion control data for causing the facial image data to move in accordance with the second message,

a third generating portion for generating the facial animation based on the motion control data and the facial

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image data; and

a transmitting portion for transmitting the second message and the facial animation.

2. The communication system according to claim 1, wherein

the server is provided with a storing portion for storing person information as information concerning the human or the like, and

the first generating portion generates the second message with reference to the person information concerning the human or the like.

3. The communication system according to claim 2, wherein

the server is provided with a storing portion for storing sentence information as information for generating a conversation sentence, and

the first generating portion extracts such sentence information that are likely to be used for a response from the human or the like to the first message and generates the second message.

4. The communication system according to claim 1, wherein

the facial image data are data represented by a three-dimensional model so structured as to move, and

the third generating portion causes a structured part of the three-dimensional model to move based on the motion control data.

5. A communication system for performing a conversation with an actual or fictional human, animal, doll, character or the like virtualized by using a

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computer, comprising:

- a client and a server;

- the client includes:

- an input portion for inputting a first message addressed from a user to the human or the like;

- a transmitting portion for transmitting the first message;

- an output portion for outputting a second message to the user, the second message being addressed from the human or the like to the user as a response to the first message;

- a receiving portion for receiving the second message, facial image data indicating a face of the human or the like by using image data and motion control data for causing the facial image data to move in accordance with the second message;

- a generating portion for generating facial animation of the human or the like based on the motion control data and the facial image data; and

- a display portion for displaying the facial animation, and

- the server includes:

- a storing portion for storing the facial image data;

- a receiving portion for receiving the first message;

- a first generating portion for generating the second message in response to the reception of the first message;

- a second generating portion for generating the motion control data; and

- a transmitting portion for transmitting the second message and the motion control data.

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6. The communication system according to claim 5, wherein

the server is provided with a storing portion for storing person information as information concerning the human or the like, and

the first generating portion generates the second message with reference to the person information concerning the human or the like.

7. The communication system according to claim 6, wherein

the server is provided with a storing portion for storing sentence information as information for generating a conversation sentence, and

the first generating portion extracts such sentence information that are likely to be used for a response from the human or the like to the first message and generates the second message.

8. A communication system for performing a conversation with an actual or fictional human, animal, doll, character or the like virtualized by using a computer, comprising:

a client and a server; wherein

the client includes:

a storing portion for storing facial image data of the human or the like;

an input portion for inputting a first message addressed from a user to the human or the like;

a transmitting portion for transmitting the first message;

an output portion for outputting a second message to

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the user, the second message being addressed from the human or the like to the user as a response to the first message;

a receiving portion for receiving the second message, the facial image data and motion control data for causing the facial image data to move in accordance with the second message;

a generating portion for generating facial animation of the human or the like based on the motion control data and the facial image data; and

a display portion for displaying the facial animation, and

the server includes:

a receiving portion for receiving the first message;

a first generating portion for generating the second message in response to the reception of the first message;

a second generating portion for generating the motion control data; and

a transmitting portion for transmitting the second message and the motion control data.

9. The communication system according to claim 8, wherein

the server is provided with a storing portion for storing person information as information concerning the human or the like, and

the first generating portion generates the second message with reference to the person information concerning the human or the like.

10. The communication system according to claim 9, wherein

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the server is provided with a storing portion for storing sentence information as information for generating a conversation sentence, and

the first generating portion extracts such sentence information that are likely to be used for a response from the human or the like to the first message and generates the second message.

11. A server used for a communication system for performing a conversation with an actual or fictional human, animal, doll, character or the like virtualized by using a computer, the server comprising:

a storing portion for storing facial image data of the human or the like;

a receiving portion for receiving a first message addressed from a user to the human or the like;

a first generating portion for generating a second message, the second message being addressed from the human or the like to the user as a response to the first message;

a second generating portion for generating motion control data for causing the facial image data to move in accordance with output of the second message;

a third generating portion for generating facial animation based on the motion control data and the facial image data; and

a transmitting portion for transmitting the second message and the facial animation.

12. The server according to claim 11, wherein the facial image data are data represented by a three-dimensional model so structured as to move, and

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the third generating portion causes a structured part of the three-dimensional model to move based on the motion control data.

13. A server used for a communication system for performing a conversation with an actual or fictional human, animal, doll, character or the like virtualized by using a computer, the server comprising:

a storing portion for storing facial image data of the human or the like;

a receiving portion for receiving a first message addressed from a user to the human or the like;

a first generating portion for generating a second message, the second message being addressed from the human or the like to the user as a response to the first message;

a second generating portion for generating motion control data for causing the facial image data to move in accordance with output of the second message; and

a transmitting portion for transmitting the second message and the motion control data.

14. A server used for a communication system for performing a conversation with an actual or fictional human or like virtualized by using a computer, the server comprising:

a receiving portion for receiving a first message addressed from a user to the human or the like;

a first generating portion for generating a second message, the second message being addressed from the human or the like to the user as a response to the first message;

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a second generating portion for generating motion control data for moving facial image data of the human or the like in accordance with output of the second message; and

a transmitting portion for transmitting the second message and the motion control data.

15. A client used for a communication system for performing a conversation with an actual or fictional human, animal, doll, character or the like virtualized by using a computer, the client comprising:

an input portion for inputting a first message addressed from a user to the human or the like;

a transmitting portion for transmitting the first message;

an output portion for outputting a second message, the second message being addressed from the human or the like to the user as a response to the first message,

a receiving portion for receiving the second message, facial image data indicating a face of the human by using image data and motion control data for causing the facial image data to move in accordance with the second message;

a generating portion for generating facial animation of the human or the like based on the motion control data and the facial image data; and

a display portion for displaying the facial animation.

16. The client according to claim 15, wherein the facial image data are data represented by a three-dimensional model so structured as to move, and the generating portion causes a structured part of

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the three-dimensional model to move based on the motion control data.

17. A communication system for performing a conversation with watching a partner's animation comprising:

a host computer and a plurality of terminal devices, wherein

each of the terminal devices includes:

a transmission and reception portion for transmitting and receiving a voice;

a first receiving portion for receiving image data,

a second receiving portion for receiving motion control data used for moving the image data; and

a display portion for displaying animation generated by moving the image data based on the motion control data, and

a the host computer includes:

a receiving portion for receiving a voice;

a translation portion for translating the received voice into another natural language;

a first transmitting portion for transmitting the translated voice;

a generating portion for generating the motion control data based on the translated voice; and

a second transmitting portion for transmitting the image data and the motion control data of one of the terminal devices in communication to another one of the terminal devices in the communication.

18. The communication system according to claim 17, wherein

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the facial image data are data represented by a three-dimensional model so structured as to move, and a structured part thereof are caused to move based on the motion control data in displaying the animation.

19. A host computer used for a communication system for performing a conversation with watching partner's animation, the host computer comprising:

a transmission and reception portion for transmitting and receiving a voice;

a translation portion for translating the received voice into another natural language;

a first transmitting portion for transmitting the translated voice;

a generating portion for generating motion control data used for making facial image data move based on the translated voice; and

a second transmitting portion for transmitting the image data and the motion control data of one of the terminal devices in communication to another one of the terminal devices in the communication.

20. A communication system for performing a conversation with watching partner's animation, comprising:

a host computer and a plurality of terminal devices, wherein

each of the terminal devices includes:

a first transmission and reception portion for transmitting and receiving a voice;

a storing portion for storing image data;

a second transmission and reception portion for

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transmitting and receiving the image data;

a generating portion for generating motion control data for causing the received image data to move based on the received voice; and

a display portion for displaying animation generated by moving the received image data based on the motion control data, and

the host computer includes:

a receiving portion for receiving a voice;

a translation portion for translating the received voice into another natural language; and

a transmitting portion for transmitting the translated voice.

21. A communication method comprising the steps of:
preparing animation in a first terminal device connected to a network;

transmitting a voice signal of a sentence comprised in a natural language from a second terminal device to a host computer via the network;

receiving the sentence of the transmitted voice signal in the host computer so as to translate the sentence into a sentence comprising another language;

generating a voice signal corresponding to the translated sentence,

generating a motion control signal of animation corresponding to the voice signal of the translated sentence,

transmitting the generated voice signal and the generated motion control signal from the host computer to the first terminal device via the network; and

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receiving the transmitted voice signal and the transmitted motion control signal in the first terminal device so as to output a voice corresponding to the voice signal for moving the animation in accordance with the motion control signal.

22. The communication method according to claim 21, wherein

the animation indicates a face of a human.

23. The communication method according to claim 22, wherein

the motion control signal is a signal for controlling a motion of a mouth of the animation corresponding to the translated sentence.

24. The communication method according to claim 21, wherein

the animation moves in accordance with the output of the voice.

25. A communication method comprising the steps of:
receiving a voice signal of a sentence comprised in a natural language from a terminal device;

translating the sentence of the received voice signal into a sentence comprising another natural language;

generating a voice signal corresponding to the translated sentence;

generating a motion control signal of animation corresponding to the generated voice signal; and

transmitting the generated voice signal and the generated motion control signal to another terminal device.

26. A communication method comprising the steps of:

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receiving a voice signal of a sentence comprised in a natural language from a terminal device;

translating the sentence of the received voice signal into a sentence comprising another natural language;

generating a voice signal corresponding to the translated sentence; and

transmitting the generated voice signal to another terminal device.

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